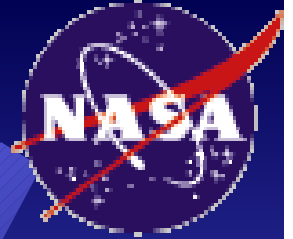


NASA Goddard Space Flight Center

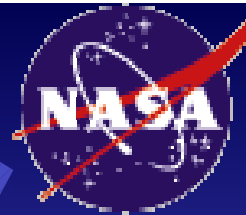


Licensing NASA Technologies and Partnership Agreements

Hilbert Huang Industry Workshop
March 24, 2002

Ms. Evette Conwell
Technology Transfer Program
Code 504

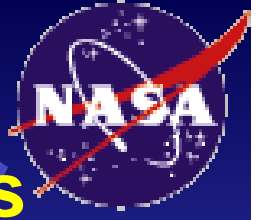
Licensing Objectives



- ✱ Protect industry's investment to commercialize the NASA technology
- ✱ Impact to licensee & U.S. economy
 - ✱ Create jobs
 - ✱ Competitive advantage
 - ✱ Financial success
- ✱ Furthers NASA's commercialization activities
- ✱ Provides incentive for inventor to participate in technology transfer

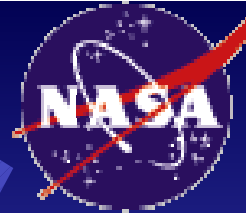


Maximize Benefit of Taxpayer-Funded Technology



Licensee Qualification Requirements

- ✱ 37 C.F.R. Part 404
 - ✱ Licensing of government owned inventions
 - ✱ Establishes terms, conditions, and procedures
- ✱ Licensed and registered to conduct business in the United States
- ✱ Substantial manufacturing in the United States



Licensing Process

NASA files patent application

Market & announce
availability for licensing

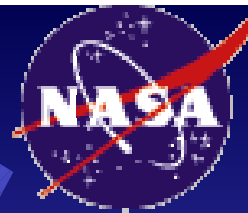
Review license applications,
which include commercialization plans

Publish notice in the *Federal Register*
(exclusive & partially exclusive
applicant(s) only)

Selection/Denial of license
application(s)

Negotiate/Execute license
agreement with selected
applicant(s)

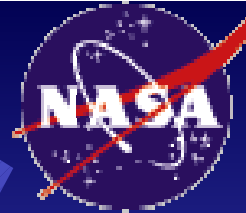




Identifying Technology & Patenting

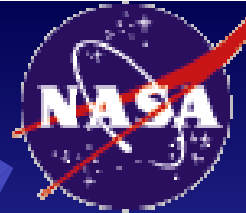
- Technology/Market Assessment positive
 - Accurate analysis of nonlinear, nonstationary signals
 - Gives more precise data analysis results than Fourier-based methods
 - When used as a filter, provides sharper analysis than Fourier-based filters
- Proven: Has been used to analyze underwater acoustic signals
- Patents: Nov. 1999, No. 5,983,162
Oct. 2001, No. 6,311,130
Apr. 2002, No. 6,381,559
- Operational at Goddard
- Technical Papers written





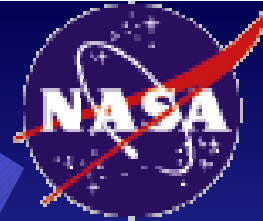
Technology Marketing

- Publications
 - Tech Briefs
 - Technical papers
- Tradeshows and Conferences
 - General Discussions
 - NASA Advanced Medical Technology Summit Feb. 2003
 - Technology Opportunity Announcement and other literature
- Workshop & Briefings
 - Provides equal dissemination of information
 - In-depth discussions
 - Opportunity to talk to the inventor & to “see” the technology



Awards

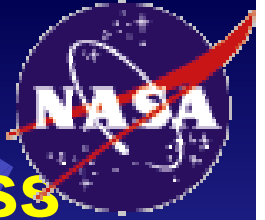
- NASA Exceptional Space Act Award, 1998
- Federal Government Technology Leadership Award 1999
- In 2000 Dr. Huang was elected to the National Academy of Engineering for his patented invention of the Hilbert-Huang Transformation (HHT) Method.
- R& D 100 Magazine Award 2001
- Federal Laboratory Consortium (FLC) Award 2001



License Application Requirements

- ★ Commercialization Plan (Marketing & Development)
- ★ Proposed fee and royalty rates
 - ★ *Upfront fee*
 - ★ *Minimum and running royalty rates*
- ★ Term of license
- ★ Type of license (Field of Use)
 - ★ Non-exclusive
 - ★ Exclusive or partially exclusive
 - ★ Geographic area(s) of manufacturing and sales
 - ★ Requires 15-day notice in the ***Federal Register***
- ★ Application submission deadline TBD



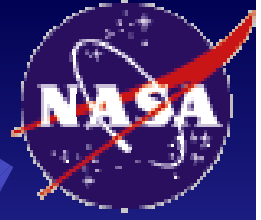


License Application Selection Process

- Evaluate license applications
 - Based on 37 C.F.R. Part 404
 - Selection Criteria
 - Technical factors
 - Business factors
 - Managerial factors
 - Economic impact
- Initiate discussions
- Select commercialization partners
- Commence negotiations

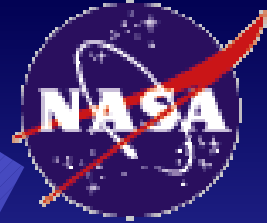


License Management



- Schedule and Milestones
 - Monitor licensee's developmental efforts based on the submitted commercialization plan
- Examples of milestones
 - Commercial prototype completion date
 - Test Marketing of product
 - "Practical Application" – 37 C.F.R. 404.3
- Keep good accounting records
- Periodic reports & meetings (yearly)

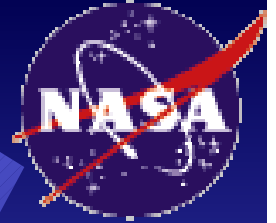




Space Act Agreements

- Space Act of 1958, as amended, gives authority to enter into such Agreements
- Government Funds its part
- Industry funds its part
- Must benefit the Government
- Invention and data rights are negotiable
- SAA's may be non-reimbursable or reimbursable



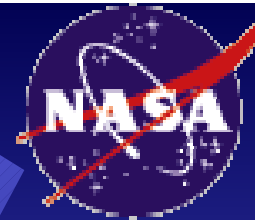


Software Usage Agreements

- ✦ For use of evaluation with intention to license
- ✦ For use R&D (government & universities)
- ✦ Term is for a limited time
- ✦ Code is returned at the end of time period



Cooperative Agreements



- Space Act of 1958, as amended, gives authority to enter into such agreements
- Does not authorize the buying of goods or services
- Typically a cost sharing agreement
- Must benefit the government
- Data clauses fully negotiable
- Invention rights are not negotiable – government has rights to invention
 - Small business: governed by FAR 52.2777-11 and NASA FAR Supplement 18-52.277-11
 - Large Entity: governed by New Technology Clause 18-52.277-70 of NASA FAR Supplement 18-52.277-11